

# Work Order ID 81728

March-19-12 8:44:42 AM

**\*81728\***

Page 1

Item ID: D3874-2 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Floor Protector  
 Start Date: 29/03/2012 Start Qty: 2.00 **\*2\*** Cust Item ID:  
 Required Date: 03/04/2012 Req'd Qty: 2.00 **\*2\*** Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 12/03/19 Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3874	A

100 0.00  
**\*100\***  
 HandThermo Memo 0.00 x4 Dh  
 Hand Finishing Thermoforming I-Cut Sheet to required Blank size 12/04/10

105 0.00  
**\*105\***  
 HandThermo Dry Material Memo 0.00 x1 Dh  
 Hand Finishing Thermoforming Dry Sheet as per QSI022 POLYCARBONATE 12/04/10  
 Temp: 240° F  
 Time IN: 7:00 pm 12/04/09  
 Time OUT: 6:00 am 12/04/10

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*81728\***

Page 2

**\*N900040100\***

Setup Start **\*NS1\***

Stop \*NS2\*

\*2\*

**Cust Item ID:**

\*2\*

**Customer:**

**Reference:**

Run Start \*NR1\*

**Tooling:**

Date:

Stop \*NR2\*

**SPC (Y/N):**

Date:

Accept Qty	Reject Qty	Reject Number	Insp. Stamp

0.00

**\*110\***

0.00

### Thermoform

## Thermoforming Machine

## Memo

1-Machine Set-Up  
2-Pre-heat Tool to required temp.  
3-Thermoform as per Dwg and Folio #FTA039 using tool DT9474  
Dwg Rev: A  
Folio Rev: B

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*120\***

0,00

QC

## Quality Control

## Memo

Visually inspect part for proper formation and texture

QC8- Inspect parts - second check

0.00

**\*130\***

0.00

QC

## Quality Control

# Dart Aerospace Ltd

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# Work Order ID 81728

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Page 4

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 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Identify as per dwg & Stock Location: _____	0.00							
<b>*170*</b>									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
<b>*180*</b>									
QC	Memo	0.00							
Quality Control									

yk  
 SP  
 12-04-14  
 12/4/17  
 MF  
 12-04-14

# Dart Aerospace Ltd

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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

March-19-12 8:44:45 AM

Page 1

Work Order ID: 81728

\*81728\*

Parent Item: D3874-2

\*D3874-2\*

Parent Item Name: Floor Protector

Start Date: 29/03/2012

Required Date: 03/04/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev. A 09.02.06 New Issue DL  
Add Step 105 Dry Material 10/04/21 DL

IPP Rev B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.118-90318-08		Purchased	No			100	sf	1,458.786	4.38	8.76			

\*MI FXS 118-90318-08\*

Lexan Sheet

\*\*

Location

Loc Qty

Loc Code

therm

113127

1458.786941

1458.78694

20.5964

DL  
12/04/12

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	21728
<b>Description:</b> Floor Protector		<b>Part Number:</b>	D3874-2
<b>Inspection Dwg:</b> D3874	<b>Rev:</b> A	<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

### THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>1/8</u> "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: WH

Date: 12/04/10

### TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.050	Min	0.089"	✓		CAL TH-DT	
0.065	Min	0.085"	✓		CAL TH-DT	
0.5	Min	0.565"	✓		USE DL-01	
21.9	REF	21.9"	✓		TAPE TH-DT	

Measured by: WH

Date: 12/04/11

Audited by: SB

Date: 12/04/12

Prototype Approval: N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	<u>[Signature]</u>

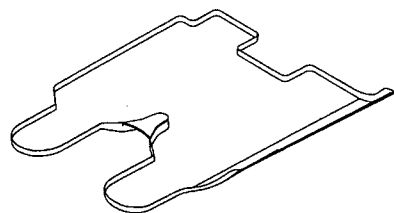
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

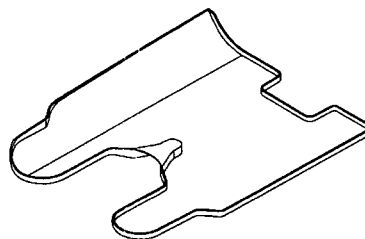
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**NOTE:** Date & initial all entries



**D3874-1 FLOOR PROTECTOR**



**D3874-2 FLOOR PROTECTOR**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 81728 MLCJ

12/03/19

**RELEASED**  
09/03/05 MLCJ

A	NEW ISSUE	PH	09.01.29
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	PH		
CHECKED	PH	DRAWING NO.	REV. A
MFG. APPR.	PH	D3874	SHEET 1 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	FLOOR PROTECTOR	NTS
DATE	09.01.29	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
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**NOTE:** Date & initial all entries

8

7

6

5

4

3

2

1

D

C

B

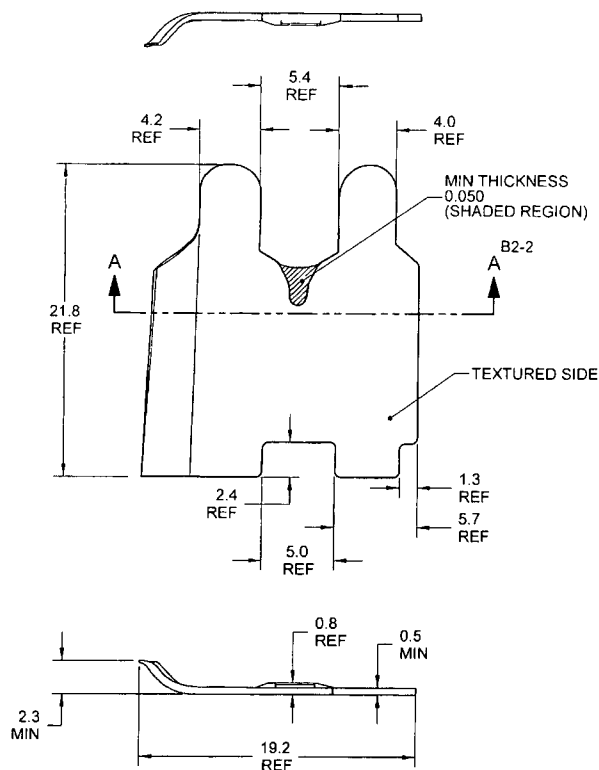
A

D

C

B

A



**D3874-1 FLOOR PROTECTOR**

**SECTION A-A**  
SCALE 2X

**RELEASED**  
09/05/05

**NOTES:**

- 1) MATERIAL: LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3874-1" USING VIBRATING STYLUS
- 7) WEIGHT: 1.5 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9474 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.065" ELSEWHERE EXCEPT AS SHOWN

DESIGN	PH	<b>DART AEROSPACE LTD</b>	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3874	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		FLOOR PROTECTOR	NTS
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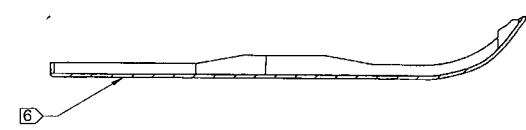
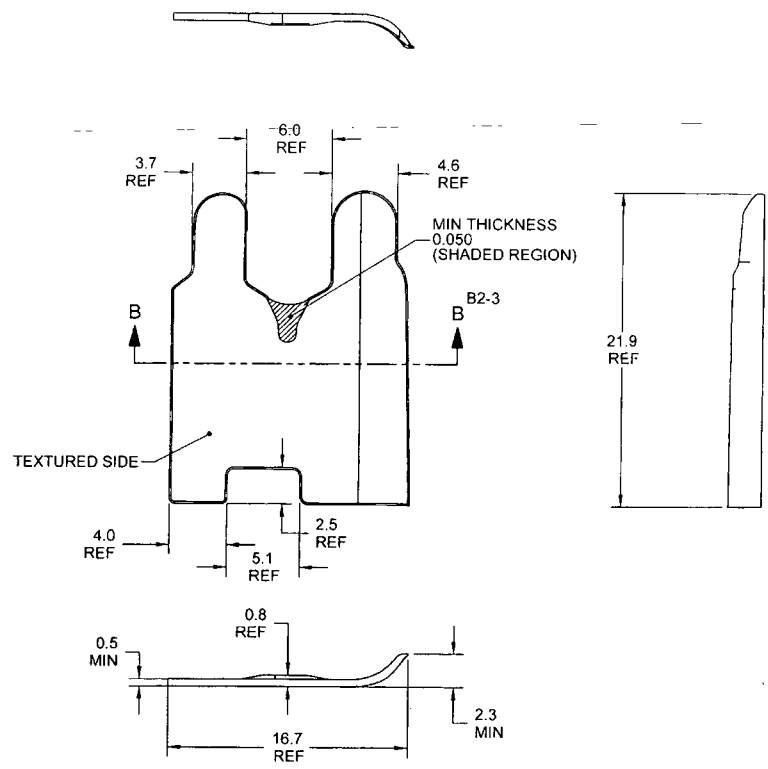
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**NOTE:** Date & initial all entries



81728



**SECTION B-B**  
SCALE 2X

**D3874-2 FLOOR PROTECTOR**

**RELEASED**  
29/05/09

**NOTES:**

- 1) MATERIAL: LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3874-2" USING VIBRATING STYLUS
- 7) WEIGHT: 1.5 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9474 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.055" ELSEWHERE EXCEPT AS SHOWN

DESIGN	PA	<b>DART AEROSPACE LTD</b>	
DRAWN	PA	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3874	SHEET 3 OF 3
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